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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/664,776	09/17/2003	Gary K. Michelson	101.0056-16000	4856
22882	7590	06/30/2006	EXAMINER	
MARTIN & FERRARO, LLP 1557 LAKE O'PINES STREET, NE HARTVILLE, OH 44632			REIMERS, ANNETTE R	
			ART UNIT	PAPER NUMBER

3733

DATE MAILED: 06/30/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/664,776

Applicant(s)

MICHELSON, GARY K.

Examiner

Annette R. Reimers

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 May 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 8-29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 8-29 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 8-13, 15-19 and 24-27 are rejected under 35 U.S.C. 102(e) as being anticipated by Estes (US Patent Number 5,578,034)

Estes discloses various embodiments of a plate system comprising a plate, 12, having a mid-longitudinal axis and a length sufficient to span the disc space and overlap portions of the at least two adjacent vertebral bodies, the plate having a lower surface for placement against the vertebral bodies and an upper surface opposite the lower surface; at least two bone screw receiving holes, 18, extending through the plate from the upper surface through the lower surface; a plurality of bone screws, 14, each bone screw insertable in one of the bone screw receiving holes, each bone screw having a head, 20, a tip opposite the head, and a threaded shaft, 22, the head having a maximum height parallel to the central longitudinal axis of the bone screw and a maximum diameter transverse to the central longitudinal axis of the bone screw, the maximum height of the head being less than one-half the maximum diameter of the

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head; and a locking element, 16 having a lower-facing surface adapted to cover a portion of the head of only a single one of the bone screws to prevent the inadvertent backing out of the single bone screw from one of the bone screw receiving holes, the locking element having an outer diameter, a central longitudinal axis, and an opening through the locking element along the central longitudinal axis (see figures 1, 2, 5A and 5B).

The opening has a maximum inner diameter that is greater than one-half the outer diameter of the locking element, wherein the locking element has a top surface that is at least in part arcuate in a plane parallel with the central longitudinal axis of the locking element, wherein the top surface of the locking element projects from the upper surface of the plate when fully engaged thereto (see figures 1 and 2). The central longitudinal axis of the locking element is coaxial with the central longitudinal axis of the single bone screw, wherein the locking element fixes the position of the central longitudinal axis of the single bone screw relative to the plate (see figure 1). The head of the single bone screw includes an outer side surface with a flat portion along a portion of the height of the screw (see figure 1).

The locking element has a top portion with the lower-facing surface and an intermediate portion having a side surface oriented toward the head of the bone screw, the bottom of the locking element having an upper surface oriented toward the head of the single bone screw, the lower surface of the top portion and the upper surface of the bottom each having a portion in a vertical plane parallel to the central longitudinal axis of the locking element, wherein the locking element can be preinstalled and is without

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threading (see figure 2). Regarding method claims 24-27, the device of Estes can perform the disclosed method for connecting at least two vertebral bodies adjacent a disc space from an anterior aspect of the vertebral bodies.

With regard to the statement of intended use and other functional statements, they do not impose any structural limitations on the claims distinguishable over Estes, which is capable of being used as claimed if one so desires to do so. *In re Casey*, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 136 USPQ 458, 459 (CCPA 1963). Furthermore, the law of anticipation does not require that the reference "teach" what the subject patent teaches, but rather it is only necessary that the claims under attack "read on" something in the reference. *Kalman v. Kimberly Clark Corp.*, 218 USPQ 781 (CCPA 1983). Furthermore, the manner in which a device is intended to be employed does not differentiate the claimed apparatus from prior art apparatus satisfying the claimed structural limitations. *Ex parte Masham*, 2 USPQ2d 1647 (1987).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 20-23 and 28-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Estes (US Patent Number 5,578,034).

Estes discloses the claimed invention except for the locking element and the plate being made of the same material and use of a bone graft or a bone growth

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promoting material. It would have been obvious to one having ordinary skill in the art at the time the invention was made to make the locking element and the plate of the Estes device from the same material or to incorporate a bone graft or a bone growth promoting material to the device of Estes, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. In re Leshin, 125 USPQ 416.

Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Estes (US Patent Number 5,578,034) in view of Lin (US Patent Number 5,085,660).

Estes discloses the claimed invention except the head of the single bone screw including a tool engaging recess. Lin discloses a plate system with a head of a bone screw having a tool-engaging recess, wherein the recess is used to facilitate a tool screwing the screw into the bores of the plate (see figure 1 and column 1, lines 66-68). It would have been obvious to one skilled in the art at the time the invention was made to construct the device of Estes with the head of the single bone screw including a tool engaging recess, in view of Lin, in order to facilitate a tool screwing the screw into the bores of the plate.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See PTO 892 for art cited of interest.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Annette R. Reimers whose telephone number is (571) 272-7135. The examiner can normally be reached on Monday-Friday.

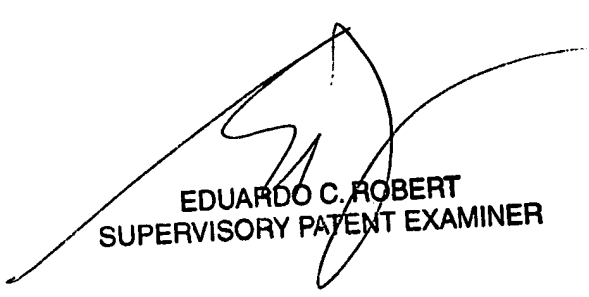
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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eduardo Robert can be reached on (571) 272-4719. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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EDUARDO C. ROBERT
SUPERVISORY PATENT EXAMINER